Abstract

A method of simulating a tire on snow comprises

making a model of the tire made up of numerically analyzable elements,

making a model of the snow made up of numerically analyzable elements being capable of presenting its volume change caused by compression and being capable of maintaining a volume change after the compression is removed,

repeating: setting of conditions for rolling the tire model and contacting the tire model with the snow model; computing of deformation of the tire model; and computing of deformation of the snow model, at minute time intervals to obtain at least one of the following data: a force produced on the tire model in the back and forth direction; and mass density, pressure, stress, speed and contact force of the snow model, and

outputting the above-mentioned at least one of the data.